Communicable Disease Report

Hawai'i Department of Health
Communicable Disease Division

March/April 2001

Recent Increase in Syphilis Cases in Hawaii

MEDICALALERT!

During the first two months of 2001, there have been four cases of early syphilis reported in Hawai`i. There were three infectious primary cases reported along with one early latent case. This compares to only two cases being reported in all of 2000.

Hawai`i has had a very low incidence rate of syphilis, 0.3 cases per 100,000 population, for the past seven years. If the present trend were to continue for the remainder of the year, we would expect 24 cases with an incidence rate of 2.0 per 100,000 population. The dominant characteristic of the present outbreak is that the three male cases are men who have sex with other men (MSM). One of the three males was also diagnosed with Human Immunodeficiency Virus (HIV). These are the same dominant characteristics of recent outbreaks in Los Angeles, San Francisco, and Seattle. The possibility of syphilis re-emerging as a major health problem in Hawai`i is a serious concern.

The Department of Health (DOH) asks for your assistance in the prompt diagnosis, treatment, and reporting of any syphilis cases you may encounter. The DOH recommendations for the patient management and reporting of primary and secondary syphilis are outlined in the following pages.

We strongly advise that all patients diagnosed with syphilis or any sexually transmitted disease (STD) be tested for HIV infection.

We appreciate your continued support in the prevention and control of STD's in Hawai`i. If you have any questions or need more information regarding this advisory, please call Roy Ohye or Venie Lee of the STD Prevention Program at (808) 733-9281.

SYPHILIS PATIENT MANAGEMENT AND REPORTING

Clinical Categories

Consider **primary syphilis** in the differential diagnosis of patients presenting with a painless ulcerative lesion (chancre) in the mouth, genitals, perineum, or anus with or without regional lymphadenopathy.

Secondary (disseminated) syphilis classically presents 2 to 8 weeks after primary infection as a copper-colored maculopapular rash widely distributed on the trunk, extremities, and particularly on the palms and soles. The primary chancre may or may not be present. Additional findings in secondary syphilis may commonly include

- alopecia;
- highly infectious mucous patches on the lips, oropharynx, and genitalia;
- condylomata lata;
- generalized lymphadenopathy (especially epitrochlear adenopathy);
- fever, arthralgias, malaise, anorexia, weight loss, pharyngitis, laryngitis, aseptic meningitis and anterior uveitis.

Latent syphilis is the stage of the disease where there are no clinical manifestations of syphilis, but the specific treponemal serologic test for syphilis is positive. Latent syphilis acquired within the preceding year is referred to as early latent syphilis. All other cases of latent syphilis are either late latent syphilis or syphilis of unknown duration.

Late (tertiary) syphilis includes chronic neurosyphilis, cardiovascular syphilis, ophthalmologic lesions, or local gummatous lesions.

Diagnosis

The direct examination of mucocutaneous lesions for spirochetes by **dark-field analysis (DFA)** is the definitive

continued on page 4

Public Health Preparedness and Response for Bioterrorism

Biological Terrorism and Warfare

Humanity has been visited by many disease-causing organisms throughout the ages. The list of the "killers of the masses" are few, but highly memorable: plague, cholera, yellow fever, typhus, influenza and polio. These are all naturally occurring organisms which were either endemic to an area or were hitchhikers on the trade routes of human commerce. Humanity has justified the visitation of death by disease as an "act of nature."

But just as some tried to find ways to treat and prevent these killers, others saw opportunities to use these diseases to promote their own "causes." This was the beginning of what we now call biological warfare. The use of biological weapons to destroy or impede an enemy has occurred many times both in antiquity and the present era. Fortunately, the offensive use of biological weapons in modern warfare is still considered repugnant for most of the civilized world. However, threats to this rather fragile adherence to non-use of biological weapons prompted 140 nations to ratify the 1972 Biological and Toxin Weapons Convention (BWC). The BWC called for the termination of all offensive weapons research and development, as well as the destruction of existing stockpiles of biological agents. We now know that even though the United States (U.S.) and other western nations complied with the BWC, which was ratified by all participants to eliminate their stores of biological agents, at least 10 nations did not. In fact, nations such as the former Soviet Union and Iraq actually accelerated their research and development efforts after the BWC signing. This continued production of offensive biological weapons prompted the U.S. government to address the potential for biological terrorism to impact the U.S.

Biological Terrorism Response Program

As a result of this breach of the BWC, Presidential Decision Directives 39 and 62 were issued in 1995 and 1998 respectively. These Directives specify the responsibilities of the federal agencies and their relationships to one another in the conduct of crisis and consequence management. They are responsible not only to counter terrorism, but also to protect the public health during such an attack. In 1998, the Department of Health and Human Services, Office of Emergency Preparedness, awarded a contract to the State of Hawai`i to develop the Metropolitan Medical Response System (MMRS) for the City and County of Honolulu. As part of that contract, the Honolulu Biological Incident Response Plan (HBIRP) was written as part of the City and County of Honolulu's Response Plan for Terrorist Incidents involving Nuclear, Biological or Chemical agents (NBC), or Weapons of Mass Destruction (WMD). This plan describes how local, state, federal, and private agencies are to respond to a biological incident or biological terrorist event. In addition to the MMRS, the Centers for Disease Control and Prevention (CDC) last year awarded three grants to the Department of Health (DOH) to explore the state's public health capacity to respond to an act of biological terrorism. These grants address Preparedness Planning and Readiness Assessment, Surveillance and Epidemiology Capacity, and Laboratory Capacity.

Preparedness Planning and Readiness Assessment

The purpose of this grant is to develop a comprehensive statewide public health response plan which seamlessly integrates the total health response with existing local, county, and state civil defense response plans to effectively manage a biological terrorism event which complements and links with the Honolulu MMRS. A consequence management team comprised of representatives from civil defense and state public health officials within each county is coordinating the planning and development of a statewide Terrorism Response Plan. The teams are tasked to define

- early warning indicators of a biological incident,
- augment epidemiology surveillance activities,
- ensure the State Laboratories Division (SLD) core diagnostic capabilities for agents of biological and chemical terrorism,
- develop a plan for mass prophylaxis and immunization,
- develop plans for mass casualty care and mass fatality management, and
- address environmental health and safety issues following a biological or chemical terrorism event.

These representatives recently participated in an Office for State and Local Domestic Preparedness Support Needs

continued on page 8

Communicable Disease Report

Communicable Disease Division	586-4580
Epidemiology Branch	586-4586
Tuberculosis Disease Control Branch	832-5731
Hansen's Disease Control Branch	733-9831
STD/AIDS Prevention Branch	733-9010
STD Reporting	733-9289
AIDS Reporting	733-9010
Information & Disease Reporting	586-4586
After-hours Emergency Reporting	247-2191 (State Operator)
After-hours Neighbor Island Emergency Reporting	800-479-8092

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Kalaupapa — Past and Future

Early History

Off the northern shore of Moloka`i lies a triangular piece of land, Makanalua Peninsula. Separated from the rest of Moloka`i by high 1500 - 2000' cliffs, it is pounded by the same winter waves that create the 15 - 20' surf on Oahu's North shore. This beautiful but extremely isolated piece of land was selected as the site for the quarantine of Hansen's disease patients in 1865 and continues to be the home of 46 former patients today.

The earliest of the patients settled on the eastern side of the peninsula in an area called Kalawao. Later the community moved to the west side of the peninsula to the Kalaupapa Settlement (KS) of today. Through the years nearly 9,000 people with Hansen's disease were quarantined there. It became their home and their final resting place.

Before effective treatment, life expectancy after arriving in Kalaupapa was only eight years. Death may have followed the progression of massive numbers of the organism, *Mycobacterium leprae*, into the upper respiratory airways requiring tracheotomies and other supportive measures. But most commonly, death would be caused by septicemia secondary to infected wounds occurring in in-sensitive hands and feet. Antibiotics were not available until the 1940's.

A Ministry of Compassion

During those early years, Father Damien came to live, work and die in Kalawao (1872 - 1889). Mother Marianne arrived with other Sisters of Saint Francis in 1888 and she lived and worked in the Settlement until her death in 1935. Brother Dutton, not of a religious order, arrived in 1888 and lived and worked in Kalawao for 44 years. These three famous citizens of Hawai`i were buried in Kalawao County. Father Damien's body was exhumed in 1932 and re-buried in Belgium, his home country - but his right hand was returned to Kalawao at the time of his beatification by the Catholic Church in 1992. Efforts towards the beatification of Mother Marianne are progressing.

The sacrifice and contribution of Father Damien, Sister Marianne, and Brother Dutton have been enriched by the recognition of the sacrifice of all the patients who had to spend their life in isolation for the protection of the greater society. In 1980 the federal government created a National Historical Park at Kalaupapa. The Federal Public law 96-565 creating the park reinforces the state of Hawai`i HRS 326 which rescinded mandatory isolation in 1969 and allowed any patient to decide whether to leave the Settlement or remain.

Most of the patients who decided to remain had lost contact with their families and had suffered some of the physical and social complications resulting from the disease. Many had been separated in childhood or early youth and were diagnosed before the availability of the sulfones (1946 in KS).

Therapeutic Advances

The sulfones were the first drugs effective against *Mycobacterium leprae*. This drug was initially used as mono-therapy. Eventually prednisone was added to the treatment regime during times of reactions. Then came thalidomide for erythema nodosum leprae reactions and finally the multi drug therapy - of dapsone, rifampin, and clofazimine. These treatment regimes revolutionized the treatment of Hansen's disease. It eliminated the fear of transmission to others after treatment started and almost eliminated the complications that lead to disabilities and unwelcomed changes in appearance.

Research in Hawai`i

A fascinating period of history occurred from 1909 - 1912 when an impressive research facility was built and staffed by the United States (U.S.) government on the Kalawao side of the peninsula. The facility closed after four years because only nine patients volunteered to become research subjects. One wonders at the process employed in the planning and implementation that must have gone astray with this project; errors that omitted community involvement, and other ethical considerations. But not all was lost - even today some of the cottages and buildings in the Settlement can trace their lumber to the dismantled Research Facility.

continued on page 6

Syphilis Cases in Hawai'i

continued from page 1

method for diagnosing primary and secondary syphilis.

If DFA is not available, the presumptive diagnosis of syphilis can be established by the tandem use of two **serologic tests for syphilis.** A positive nonspecific nontreponemal serologic screening test is followed by a confirmatory specific antitreponemal antibody test. The Venereal Disease Research Laboratory Test **(VDRL),** or the rapid plasma regain **(RPR)** tests are the two commonly used nonspecific screening tests. The two commonly used confirmatory treponemal tests are the fluorescent treponemal antibody absorbed **(FTA-ABS),** or the microhemagglutination assay for antibody to *T. pallidum* **(MHA-TP).**

All patients diagnosed with syphilis should be tested for HIV. If a patient is co-infected with syphilis and HIV, an evaluation for possible neurosyphilis or syphilitic eye disease is recommended.

Treatment

All sex or needle-sharing partners should be evaluated and treated presumptively for early syphilis. These include

- the preceding three months for a primary syphilis case,
- within six months for secondary syphilis case, and
- within one year for early latent syphilis.

Long-term sex partners of patients with late syphilis should be evaluated clinically and serologically for syphilis and treated based on the examination results.

Reporting

Syphilis is a notifiable disease to the DOH. Immediately notify the Sexually Transmitted Disease (STD) Prevention Program Office at (808) 733-9281 in Honolulu of any case of syphilis pending laboratory confirmation.

Disease Intervention Specialists (DIS) are available to assist in patient education and partner counseling and referral. For assistance, contact the DIS Supervisor at (808)-733-9281. A DIS will contact all syphilis cases to obtain additional information necessary for the public health investigation.

Counseling

We request that physicians obtain the following information from patients with primary or secondary syphilis, within the three months and six months, respectively, of diagnosis:

1. Name(s) and locating information of the patient's sex partner(s) for referral and medical management.
2. Travel history of patients and their sexual partners.

Any STD patient should be counselled about the risks of unprotected sexual relations. Travelers should be advised about the recent syphilis outbreaks on the West Coast of the United States. Patients diagnosed with an STD should be encouraged to be tested for HIV infection.

REFERENCE

Centers for Disease Control and Prevention. *1998 Guidelines for Treatment of Sexually Transmitted Diseases.* MMWR. 1998;47(No. RR-1):28-49.

Submitted by Venie, Lee, M.P.H. and Roy Ohye, M.P.H., STD Prevention Program, STD/AIDS Prevention Branch, and Philip Bruno, D.O., Chief, Communicable Disease Division.

TABLE 1: TREATMENT

Clinical Category	Treatment of Choice*	Patients Allergic to Penicillin†
Primary Syphilis, Secondary Syphilis, and Early Latent Syphilis	**Benzathine penicillin G** 2.4 million units IM in a single dose.	**Doxycycline** 100 mg orally twice a day for 2 weeks, or **Tetracycline** 500 mg orally four times a day for 2 weeks.
Late Latent Syphilis, or Syphilis of Unknown Duration	**Benzathine penicillin G** 2.4 million units IM every week for 3 weeks.	Same as above, but administer the antibiotic for 4 weeks.
Gummatous and Cardiovascular syphilis	Same as for late latent syphilis.	Same as for late latent syphilis.
Neurosyphilis	**Aqueous crystalline penicillin G** 18-24 million units a day, administered as 3-4 million units IV every 4 hours for 10-14 days.	**Penicillin desensitization** followed by aqueous crystalline penicillin G therapy.
Syphilis during pregnancy‡	The penicillin regimen appropriate for the syphilis clinical category.	**Penicillin desensitization,** followed by penicillin therapy, and specialty expert consultation.

* IM =intramuscular, IV = intravenous

† Penicillin desensitization is recommended for patients having true penicillin allergy and neurosyphilis along with consultation with an infectious diseases expert. Alternative therapy for neurosyphilis includes chloramphenical, doxycycline, or ceftriaxone for patients who have not had penicillin desensitization in conjunction with infectious disease specialty consultation. Penicillin skin testing may be helpful.

‡ Only penicillin is recommend for the treatment of syphilis during pregnancy. If the patient is penicillin allergic, penicillin desensitization is recommended. Tetracycline, doxycycline, and erythromycin are **not** recommended. Expert consultation is advised.

Correction

There was an error in the labeling of the figure appearing on the front page of the January-February 2001 issue of the *Communicable Disease Report.* The clear bars on the Hawaii AIDS graph were labeled as Incidence, but should have been labeled **Prevalence.** The dark bars were labeled as Prevalence, but should have been labeled **Incidence.** We apologize for the error.

The correction has been made on the version appearing on the Department of Health internet website at *www.hawaii.gov/doh/resource/comm_dis/cdr.html.*

Hawai`i Providers requested to be on alert for rash illness.

Outbreaks

As Hawai`i attracts tourists and other travelers from all over the world, there is a continued threat of measles and rubella importations from endemic areas. Recent measles outbreaks include:

Young adults in Australia: over 30 laboratory-confirmed cases of measles have been identified in Victoria, Australia. All but one of these (a 10 month-old female) have been between 15 and 34 years of age.

South Korea: almost 40,000 cases including 6 deaths have been reported throughout South Korea since March 2000. The outbreak started in the eastern part of the country and has been confirmed serologically and by isolation of measles virus from nine cases.

King County, Washington State: At least 9 cases of measles have been been confirmed in King County, some of which have been epidemiologically linked with the South Korean outbreak.

Measles

The incubation period of measles (rubeola) averages 10-12 days from exposure to prodrome and 14 days from exposure to rash (range: 7-18 days). The disease can be severe and is most frequently complicated by diarrhea, middle ear infection, or bronchopneumonia. Encephalitis occurs in approximately one of every 1,000 reported cases; survivors of this complication often have permanent brain damage and mental retardation. Death occurs in 1-2 of every 1,000 reported measles cases in the United States (U.S.). The risk for death from measles or its complications is greater for infants, young children, and adults than for older children and adolescents. The most common causes of death are pneumonia and acute encephalitis. In developing countries, measles is often more severe and the case-fatality rate can be as high as 25%.

Rubella

Rubella is an exanthematous illness characterized by nonspecific signs and symptoms including transient erythematous and sometimes pruritic rash, postauricular or suboccipital lymphadenopathy, arthralgia, and low-grade fever. Clinically similar exanthematous illnesses are caused by parvovirus, adenoviruses, and enteroviruses. Moreover, 25%-50% of rubella infections are subclinical. The incubation period ranges from 12 to 23 days. Before rubella vaccine was available, the disease was common among children and young adults.

Among adults infected with rubella, transient polyarthralgia or polyarthritis occur frequently. These manifestations are particularly common among women (18). Central nervous system complications (i.e., encephalitis) occur at a ratio of 1 per 6,000 cases and are more likely to affect adults. Thrombocytopenia occurs at a ratio of 1 per 3,000 cases and is more likely to affect children. The most important consequences of rubella are the miscarriages, stillbirths, fetal anomalies, and therapeutic abortions that result when rubella infection occurs during early pregnancy, especially during the first trimester. An estimated 20,000 cases of Congenital Rubella Syndrome (CRS) occurred during 1964-1965 during the last U.S. rubella epidemic before rubella vaccine became available.

Disease Reporting

Any person aware of a suspected or known case of measles or rubella should report the case ***immediately*** by telephone to the Hawai`i Department of Health (DOH). Cases of measles, rubella, and CRS are reportable in Hawai`i.

A suspected measles case is defined as any febrile illness accompanied by rash. A clinical case of measles is defined as an illness characterized by a generalized rash lasting greater than or equal to 3 days, and a temperature of >38.3 C (>101 F), and cough, coryza, or conjunctivitis.

A suspected rubella case is any generalized rash illness of acute onset. A clinical case of rubella is defined as an illness characterized by all of the following clinical features: acute onset of generalized maculopapular rash; and a temperature of >37.2 C (>99 F), if measured; and arthralgia/arthritis, or lymphadenopathy, or conjunctivitis.

Blood for serologic testing should be collected during the first clinical encounter with a person who has suspected measles or rubella. ***However, reporting of suspected cases should not be delayed pending laboratory results.***

Report suspected cases of measles and rubella to the DOH at the following numbers:

O`ahu: (808) 586-4586
Hawai`i: (808) 933-0912
Maui: (808) 984-8213
Kaua`i: (808) 241-3563

Emergency After Hours:
O`ahu: (808) 247-2191
Neighbor Islands: (800) 479-8092

For more information, please contact the Hawai`i Immunization Program in Honolulu at (808) 586-8332.

Submitted by Steven Terrell-Perica, M.A., M.P.H., M.P.A., Centers for Disease Control and Prevention Public Health Advisor to the Hawai`i Immunization Program, Epidemiology Branch.

The TEEN VAX Project Free Vaccines for Youth

Director of Health Dr. Bruce Anderson announced recently that Hawai`i's children and teens ages six through 18 years will continue to qualify for free vaccines under the Hawai`i Immunization Program's TEEN VAX Project.

"The Department of Health will work closely with community health care providers to make certain that all youth and children in Hawai`i are protected from infectious diseases that can be prevented," said Dr. Anderson.

Under the TEEN VAX project — hepatitis B, MMR (measles, mumps and rubella), chicken pox, and Td (tetanus and diphtheria) vaccines — will continue to be provided free to physicians, hospitals and clinics, both public and private, in Hawai`i through December 31, 2002.

These immunizations are routinely recommended for all children by the Centers for Disease Control and Prevention and the American Academy of Pediatrics. Children who begin a vaccination series during this period will be permitted to complete the series according to the recommended schedule. Many of these vaccines are required for first entry into Hawai`i schools.

For further information about TEEN VAX Project, please contact the Hawai`i Immunization Program, Vaccine Supply & Distribution, at (808) 586-8312 on O`ahu or toll-free 1-(800) 933-4832 on the neighbor islands.

Submitted by Judy Strait-Jones, M.P.H., M.Ed., Public Health Educator, Hawai`i Immunization Program, Epidemiology Branch.

Kalaupapa

continued from page 3

Research continued on O`ahu; first in the Kalihi Hospital and later in the Department of Tropical Medicine, and today in the Department of Microbiology, University of Hawai`i. However the majority of the U.S. government involvement in Hansen's disease was relocated to Louisiana in the National Hansen's Disease Center at Carville and now in Baton Rouge.

From 1969 on no one with diagnosed Hansen's disease has been sent to Kalaupapa. Yet the Hansen's Disease Branch in the Department of Health (DOH) continues to find new cases of Hansen's disease. Almost all newly diagnosed people are not born in Hawai`i but arrive from Asian/Pacific countries. Since the mid-1980's most are treated by their own primary doctors while the DOH staff assist with diagnosis, treatment, monitoring, contact follow-up and education. This process will continue into the future.

A National Historical Park

It is expected that Kalaupapa will eventually be turned over to the U.S. National Park Service (NPS). This will happen only after the last former patient resident is gone. In the meantime the DOH is responsible for medical and health care of the patient residents of Kalaupapa, their assisted living and housing. The operation of the "village" of Kalaupapa is dependent on the daily cooperative activities of the patient residents, DOH, and the NPS. The state Department of Transportation is responsible for the small airport and the pier.

It is difficult to predict what the peninsula will be like after the DOH leaves but one could anticipate hiking trails into the valleys, into the crater, and around the perimeter, with demonstrations and exhibits of the endangered plant and animal species on the peninsula, as well as a fully protected sea coast rich in sea and shore life. No doubt, Kalaupapa will

continued on page 7

New SAPB Staff

The STD/AIDS Prevention Branch (SAPB) welcomed two new staff members to their team in January, 2001.

Barbara Brouillet is the new Clinic Manager for the Diamond Head STD/HIV Clinic. She obtained her B.S. in Nursing from the University of Hawai`i (U.H.). Barbara has worked in the Department of Health's (DOH) Community Health Nursing Division, Public Health Nursing Branch since 1988. Among other activities, she has coordinated services to high risk individuals, focused on early intervention services, performed Tuberculosis investigations, organized immunization clinics and did outreach disaster nursing on Kaua`i following Hurricane Iniki.

Sharon Tokumoto is the new HIV Social Worker IV in the STD/HIV Clinic. She has a Masters of Social Work degree from the U.H. Sharon's most recent professional activities were as a multi-agency case coordinator for the Department of Human Services and with the DOH as a social worker with the Developmental Disabled Division. She earlier worked for almost 10 years with the Straub Clinic and Hospital as a Medical Social Worker, where she was involved with many early intervention and support services for individuals newly diagnosed with HIV infections. Sharon will provide early intervention and support services for newly diagnosed individuals on O`ahu and provide support for HIV counselor/testers and case managers to link clients with appropriate services.

Submitted by Peter Whiticar, Chief, STD/AIDS Prevention Branch.

Tetanus and Diphtheria Vaccine Shortage

In November 2000, the U.S. Public Health Service announced a temporary shortage of adult tetanus and diphtheria toxoids (Td) and tetanus toxoid (TT) resulting from decreased production of these vaccines by the two U.S. manufacturers. The shortage was expected to be resolved by early 2001. However in January 2001, Wyeth Lederle announced it had stopped production of tetanus-toxoid containing products, leaving Aventis Pasteur as the sole nationwide distributor of Td and TT. Although Aventis Pasteur is currently increasing Td production, the shortage is not expected to be resolved for another 12-18 months.

Immunization providers need to prioritize use of Td vaccine during this shortage. Recommendations for use of Td, listed from highest to lowest priority, are:

1) Persons traveling to a country where the risk for diphtheria is high*.
2) Persons requiring tetanus vaccination for prophylaxis in wound management.
3) Persons who have received <3 doses of vaccine containing Td.
4) Pregnant women and persons at occupational risk for tetanus-prone injuries who have not been vaccinated with Td within the preceding 10 years.
5) Adolescents who have not been vaccinated with a vaccine containing Td within the preceding 10 years.
6) Adults who have not been vaccinated with Td within the preceding 10 years.

* Travelers to certain countries may be at substantial risk for exposure to toxigenic strains of *C. diphtheriae*, especially with prolonged travel, extensive contact with children, or exposure to poor hygiene. On the basis of surveillance data and consultation with the World Health Organization, countries with highest risk are in Africa (Algeria, Egypt, and sub-Saharan Africa); the Americas (Brazil, Dominican Republic, Ecuador, and Haiti); Asia/Oceania (Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Iran, Iraq, Laos, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Syria, Thailand, Turkey, Vietnam, and Yemen); and Europe (Albania and all countries of the former Soviet Union).

The supply of DTaP vaccine has also been adversely affected by the turn of events stated above. In addition to this, both Wyeth Lederle (ACEL-IMUNE®) and Baxter Hyland Immuno Vaccines (formerly North American Vaccine, Inc.) (Certiva™) are no longer producing their DTaP vaccine products. Aventis Pasteur (Tripedia®) and Glaxo SmithKline (Infanrix™) are the remaining suppliers of DTaP. The Advisory Committee on Immunization Practices (ACIP) recommends that, whenever feasible, the same brand of DTaPvaccine should be used for all doses of the vaccination series. However, if the type of DTaP vaccine previously administered to a child is either not known or not available, any of the available licensed DTaP vaccines can be used to complete the vaccination series.

Some vaccine providers may have difficulties obtaining sufficient supplies of DTaP to vaccinate all children in their practices. If providers have insufficient quantities of DTaP, priorities should be given to vaccinating infants with the initial three DTaP doses and, if necessary, to defer the fourth DTaP dose. When adequate DTaP supplies are available, providers should recall for vaccination all children who did not receive the fourth dose of DTaP. If supplies are sufficient, children aged 4-6 years should be vaccinated according to existing ACIP recommendations. The CDC is evaluating the situation, and more guidance will be provided should have substantial supply problems occur.

For more information, please call the Hawai`i Immunization Program in Honolulu at (808) 586-8332.

REFERENCES

Centers for Disease Control and Prevention. Update on the Supply of Tetanus and Diphtheria Toxoids and of Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine. *MMWR*, 2000;50 (No. 10): 189-190. Providers should continue to prioritize Td and TT use until supplies are restored. Clinics and hospitals in need of vaccine for wound care should call Aventis Pasteur at (800) 822-2463.

Centers for Disease Control and Prevention. Shortage of Tetanus and Diphtheria Toxoids. *MMWR*, 2000;49 (No. 45): 1029-1030.

Kalaupapa

continued from page 6

continue to be a place of religious pilgrimage especially so when both Father Damien and Mother Marianne become canonized. But more importantly there will continue to be tours, displays, book shops and educational events to remember and commemorate the nearly 9000 people who were forcibly sent to Kalaupapa to protect Hawai`i from a fearful disease at a time when there was no cure.

Visits

Anyone who wishes to visit Kalaupapa should contact Damien Tours, Telephone (808) 567-6171 on Moloka`i. The tour group will arrange permission to visit and a guided tour of the peninsula. Transportation to Kalaupapa can be by air or the 2.5 mile walking path from topside Moloka`i. A mule train is also available for the adventuresome. Taking photographs of residents are not allowed unless written permission is given.

A 1998 movie filmed at Kalaupapa entitled "Molokai: The Story of Father Damien," is available for rental at most video stores.

Submitted by Mona R. Bomgaars, M.D., M.P.H., Chief, Hansen's Disease Control Branch.

Bioterrorism

continued from page 2

Assessment survey which identified DOH resources and training needs during the development of the statewide bioterrorism response plan. A priority of this grant is to provide multi-jurisdictional training in recognizing signs and symptoms of a biological incident or terrorism event, and to assess how the health care system will operate during an event. In addition, regular table top and functional exercises will be carried out to test the statewide plan.

Surveillance and Epidemiology Capacity Building

This grant will address mechanisms to

- augment existing infectious disease epidemiological capacity,
- expand operations to include a biological terrorism and emerging pathogens program,
- integrate these operations into local community health networks and civil defense disaster response plans,
- explore the core capacity of epidemiology-based surveillance,
- develop educational materials for medical students and first-line medical staff,
- provide enhanced training for the Hawai`i Association of Professionals in Infection Control (APIC) members, and
- explore the use of syndromic indicators and future electronic death records to detect a covert biological incident or terrorism event in as timely a manner as possible.

Laboratory Capacity Building

The objective of the Laboratory Capacity grant is to

- establish and enhance the core diagnostic capabilities of state public health laboratories (labs) to respond to bioterrorism (BT), and to
- develop a statewide network of diagnostic laboratories competent to deal with biological agents used in BT.

The CDC and the Association of Public Health Laboratories (APHL) have designated four levels of labs (Levels A, B, C, and D) nationwide as part of the Laboratory Response Network (LRN).

- Level A labs are private hospital or commercial labs that provide early detection of potential BT agents;
- Level B labs are state public health and/or reference labs capable of ruling-in critical BT agents;
- Level C labs are some large state public health labs, research centers, and federal facilities that provide advance diagnostic testing and are capable of testing for toxins; and
- Level D labs are U.S. government labs such as the CDC laboratory, which are highly specialized and are capable of dealing with rare and deadly pathogens such as the Ebola viruses, smallpox, etc.

The SLD BT Preparedness Laboratory recently upgraded to a Level B laboratory and will

- receive human specimens and clinical isolates referred by Level A labs and environmental samples from the site of an announced (overt) BT event, and
- have the capacity to analyze potential biological agents requiring more sophisticated and complex testing protocols.

The SLD recently applied for importation permits from the Hawai`i Department of Agriculture to allow the use of restricted microorganisms and control strains for diagnostic, reference, verification, and proficiency testing. As with other infectious and communicable diseases, the ability to perform Level B analyses of suspected biological agents will greatly enhance the early detection and identification of these bioagents resulting in a faster response from the health care community.

To ensure cooperation and better coordination of BT response and activities, training of Level A personnel will be conducted by the BT Preparedness Laboratory of the SLD. The SLD hopes to establish a pool of microbiologists who are trained to conduct the required protocols in a safe manner. Future plans of the SLD include improvement of the current core diagnostic capacity through the use of molecular techniques such as the Polymerase Chain Reaction (PCR) test. The SLD intends to upgrade to the next higher level by employing rapid testing methods to detect and identify BT agents through PCR, and by the renovation of its inoperable biosafety Level-3 Laboratory (BSL-3). A BSL-3 environment is a requirement for Level C laboratories that operate and provide advanced diagnostic testing.

Conclusion

The use of biological agents by international or domestic terrorists to either incapacitate or kill their victims is considered by many to be a low probability/high consequence event. The bombing of the Alfred P. Murrah Federal Building in Oklahoma City in 1995 was a poignant reminder that often the "unthinkable" is indeed "thinkable." Many experts involved with countering biological terrorism state that it is not a question of ***if,*** but ***when*** such an event will occur. With this in mind, the DOH, in collaboration with the CDC, is developing and fostering a comprehensive public health response plan that will address epidemics of both natural and man-made origin.

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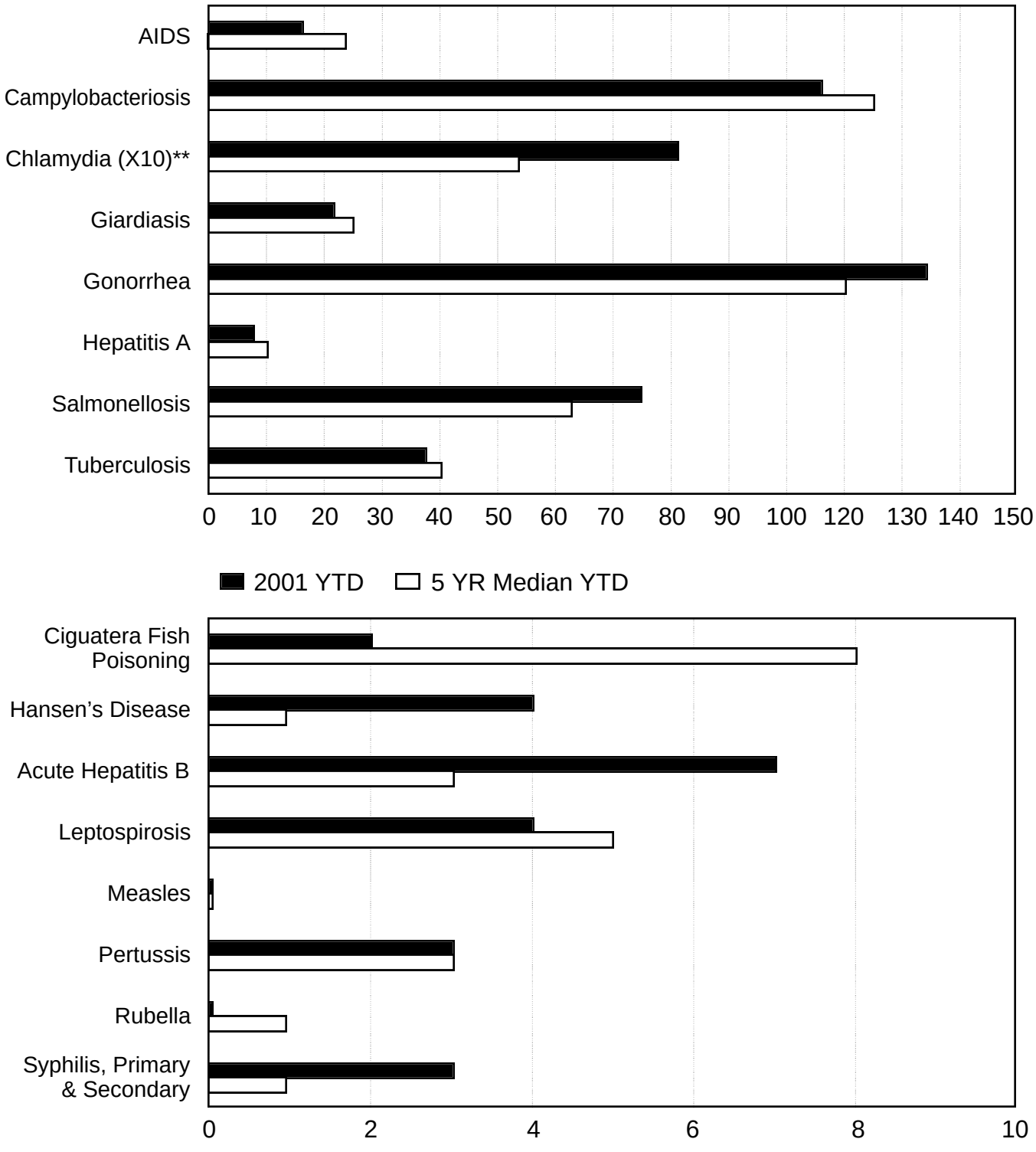
Communicable Disease Sur veillance

Selected Diseases by Date of Report*
Hawai‘i, 2001 Year-to-date Through March



* These data do not agree with tables using date of onset or date of diagnosis.
**The number of cases graphed represent 10% of the total number reported.

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March/April 2001

CONTENTS